

Southern California Wetlands Recovery Project

Description of Completed Projects

October 2003

Tijuana River Estuary and Watershed Program

- Goat Canyon Enhancement Project, Final Design Plans
- Tijuana Model Marsh Restoration

C1. Goat Canyon Enhancement Project, Final Design Plans

Date Completed: 8/03

Local Lead: Southwest Wetlands Interpretive Association

Prepare final design and engineering plans and conduct environmental review for Goat Canyon Enhancement Project. Project involves construction of sediment retention basins and reconstruction of one mile of historic stream channel; exotics removal and riparian/mule fat scrub habitat restoration for approximately 100 acres.

A conceptual plan has been completed and agreements have been reached between partner agencies and organizations for the final phase of planning required to implement the project. Work includes hydrological, hydraulic, and sediment modeling to guide preparation of construction documents and preparation of state/federal environmental document, endangered species consultations, and permitting.

Total cost: \$1,102,000

Funding:	SCC-Wetlands Recovery Project	\$952,000
	U.S. Army Corps of Engineers	\$150,000

Cost Notes: Past Planning -- \$125,000 provided by the Coastal Conservancy, EPA, & California State Parks Department in 1998-1999 for Goat Canyon Enhancement Plan.

Last updated: 4/11/2002

C2. Tijuana Model Marsh Restoration

Date Completed: 2/00

Local Lead: Southwest Wetlands Interpretive Association

Restore approximately 20 acres of intertidal salt marsh by excavating approximately 135,000 cubic yards of fill. Site includes disturbed upland and wetland transitional habitats. Excavated material is to be used in gravel quarry reclamation/coastal maritime scrub habitat restoration. The wetland project design incorporates research on the impact of tidal channels and variable planting regimens.

Construction of marsh and quarry reclamation are complete. .

Total cost: \$3,232,111

Funding:	SCC-Wetlands Recovery Project	\$1,582,111
	USFWS-National Coastal Wetlands Grant	\$800,000
	Coastal Conservancy	\$850,000

Last updated: 4/4/1998

C3. Fenton Properties Acquisition

Date Completed: 6/03

Acquire approximately 100 acres of riparian habitat located along the Otay River from I-5 to the 805. The Trust for Public Land (TPL) has an option to purchase this property. Acquisition is expected in April 2000. TPL already acquired a 100 acre parcel in this area in 1997 using \$3 million in Prop 204 money. The parcel will be split between the City of San Diego and the City of Chula Vista.

Total cost:		\$3,000,000
Funding:	Legislative Appropriation	\$3,000,000
Cost Notes:	\$3.25 million in acquisition funding was provided in the 1999-2000 state budget through a member's request.	

Last updated: 2/8/2000

San Elijo Lagoon Enhancement Program

- San Elijo Lagoon Exotics Removal
- San Elijo Lagoon Preliminary Sediment Quality Assessment
- San Elijo Lagoon Non-native Plant Management
- San Elijo Lagoon Tidal Flushing Project

C4. San Elijo Lagoon Exotics Removal

Date Completed: 2/01

Local Lead: San Elijo Lagoon Conservancy

Remove exotics plants from approximately 2.4 acres along the southern edge of San Elijo Lagoon and revegetate with native riparian and buffer species. The project area is one of several targeted for removal of exotic species in the San Elijo Lagoon Conservancy Action Plan. The project is the first in an extended effort to rid the lagoon of exotic species and re-establish the native vegetation. Habitat values of the property have been severely degraded by invasive species, predominantly giant reed and castor bean. Vegetation will be mechanically removed from the site and the site will be revegetated.

Total cost:		\$73,000
Funding:	SCC-Wetlands Recovery Project	\$63,000
	San Elijo Lagoon Conservancy	\$10,000

Last updated: 4/10/2002

C5. San Elijo Lagoon Preliminary Sediment Quality Assessment

Date Completed: 4/02

Local Lead: San Elijo Lagoon Conservancy

Perform preliminary assessment of sediment quality and depositional environment of San Elijo Lagoon as the first step in a feasibility analysis of dredging activities proposed in the SEL Action Plan. The sediment assessment will review existing sediment data and collect new data on sediment texture, contaminants, nutrients, and deposition patterns. This sediment testing will not be sufficient to meet all future regulatory needs, but will provide preliminary data for regulatory use.

The San Elijo Action Plan recommends dredging several areas of the lagoon to increase the tidal prism and ecological health of the lagoon. The character and toxicity of lagoon sediments will be a significant factor in determining the economic feasibility of carrying out these projects.

Total cost:		\$133,882
Funding:	SCC-Wetlands Recovery Project	\$67,000
	USFWS-Coastal Program Challenge Grant	\$66,882

Last updated: 4/10/2002

C6. San Elijo Lagoon Non-native Plant Management

Date Completed: 7/03

Local Lead: San Elijo Lagoon Conservancy

The project will develop and implement a comprehensive removal and management plan for non-native, invasive plants found in the wetland and riparian habitats within the San Elijo Lagoon Ecological Reserve. The invasive plant management program will be carried out in several phases. SELC will map existing plant communities around the lagoon, including the species composition and distribution of non-native, invasive species. SELC has already completed preliminary mapping for several species. SELC will then prioritize species and develop a removal

strategy for each species based on its location within the habitat, life cycle and dispersal mechanisms, nearby sensitive re-sources, and effective treatment methods. The removal plans will then be implemented, followed by a five year monitoring and maintenance program. The proposed project also includes surveying San Elijo Lagoon for *Caulerpa taxifolia*, a highly invasive exotic algae that was found nearby in Agua Hedionda Lagoon in 2000.

Total cost:		\$293,207
Funding:	SCC-Wetlands Recovery Project	\$224,000
	County of San Diego - in-kind	\$32,687
	San Elijo Lagoon Conservancy - in kind	\$36,520

Last updated: 4/10/2002

C7. San Elijo Lagoon Tidal Flushing Project **Date Completed:** 12/99

Local Lead: San Elijo Lagoon Conservancy

Restore continuous tidal action to 415 acres of degraded salt marsh through ongoing removal of sand and cobble from the mouth of the lagoon. Project also includes annual monitoring of biological and hydrological conditions. Restoration would be funded in perpetuity through establishment of an endowment fund. Continuous tidal circulation would be achieved through dredging the lagoon mouth an average of three times per year. This would include one large-scale dredging activity both east and west of the Highway 101 bridge, and two smaller operations on the west side of the bridge. This non-structural restoration project would cost a fraction of the structural alternative with far fewer impacts to the environment and surrounding community. Restoring tidal action is a prerequisite to implementing several other projects identified in the enhancement plan.

Total cost:		\$2,300,000
Funding:	SCC-Wetlands Recovery Project	\$1,700,000
	U.S. Fish and Wildlife Service	\$95,000
	County of San Diego	\$250,000
	San Elijo Lagoon Conservancy	\$255,000

Last updated: 4/10/2002

C8. Batiquitos Lagoon Saxony Property Acquisition **Date Completed:** 2/03

Local Lead: City of Encinitas

Acquire 10 acres of upland and riparian habitat adjacent to Batiquitos Lagoon and prepare a restoration plan for the property. The site is located on the south side of the lagoon, east of I-5, and runs parallel to Saxony Road. La Costa Avenue runs between the property and Batiquitos Lagoon. A highly degraded, intermittent stream runs the length of the property. The property contains Diegan Coastal Sage Scrub, Southern Mixed Chaparral, Southern Willow Riparian Scrub, Native Grassland, and Non-native Grassland habitats and is utilized by several sensitive species, including the federally threatened California Gnatcatcher and the federally endangered Least Bell's Vireo. The site is contiguous to approximately 340 acres of existing biological open space within the City of Encinitas MHCP Focused Planning Area.

Total cost:		\$1,200,000
Funding:	SCC-Wetlands Recovery Project	\$0
	TEA grant	\$880,000
	City of Encinitas	\$320,000

Cost Notes: \$50,000 of the WRP funds would be used to prepare a restoration plan for the property.

Last updated: 5/7/2002

C9. San Joaquin Marsh Enhancement - Phase I **Date Completed:** 1/00

Local Lead: University of California, Irvine

Enhance approximately 50 acres of existing freshwater marsh habitat on the San Joaquin Freshwater Marsh Reserve as part of an effort to restore the natural gradient found historically at Southern California coastal wetlands. The project also includes creation of some coastal sage scrub habitat. The project is being undertaken in a 75-acre portion of the 200-acre San Joaquin Reserve, which lies adjacent to, but disconnected from, San Diego Creek just upstream of Upper Newport Bay. The project area contains several different habitats, including perennial and seasonal freshwater to brackish marsh and ponds; riparian woodlands, and degraded coastal sage scrub. One of the main features of the project site is a series of former duck ponds, which have become filled with sediment and vegetation over the years, due in part to the lack of a consistent water supply that can be managed to sustain a variety of marsh habitats. The project focuses on restoring these ponds, developing a water intake and distribution system, and re-establishing native vegetation.

Construction was completed in January 2000. Coastal sage scrub planting will be completed in Fall of 2000.

Total cost:		\$2,492,900
Funding:	SCC-Wetlands Recovery Project	\$517,900
	San Joaquin Hills Transportation Corridor Authorit	\$400,000
	Irvine and Clarke Foundation	\$125,000
	League for Coastal Protection	\$750,000
	Coastal Conservancy	\$700,000

Last updated: 2/4/2000

Huntington Beach Wetlands Program

- Huntington Beach Wetlands -- Piccirelli Acquisition
- Huntington Beach Wetlands Acquisitions, Edison property

C10. Huntington Beach Wetlands -- Piccirelli Acquisition **Date Completed:** 6/03

Local Lead: Huntington Beach Wetlands Conservancy

Acquire 45 acres of the Huntington Beach wetlands located on either side of Magnolia Avenue. The property includes two parcels: a ten-acre piece north of Magnolia Street that is contiguous with the 20-acre parcel HBWC acquired from Southern California Edison in 2000; and a 35-acre parcel that is located between Magnolia and Brookhurst Streets. Both parcels are bordered on the east by the Huntington Beach flood control channel. The southern parcel is contiguous with a 16.7-acre parcel that is currently owned by the University of California (UC). Between the southern parcel and the Pacific Coast Highway is a stretch of coastal dune habitat restored by Caltrans in 1991. In combination, this totals 90 acres of protected and managed coastal habitat.

The wetlands on the property are currently degraded. They are totally isolated from tidal exchange by the levee of the Huntington Beach flood control channel, and function as seasonal wetland. Vegetation is dominated by pickleweed, which nearly blankets the site leaving virtually no habitat diversity.

Total cost:		\$1,630,000
Funding:	SCC-Wetlands Recovery Project	\$1,180,000
	California EarthCorps	\$450,000

Last updated: 6/30/2003

C11. Huntington Beach Wetlands Acquisitions, Edison property **Date Completed:** 10/01

Local Lead: Huntington Beach Wetlands Conservancy

Acquire 20 acre parcel of the Huntington Beach wetlands adjacent to power plant. The property will be owned and managed by the Huntington Beach Wetlands Conservancy.

Total cost:		\$945,000
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Funding:	SCC-Wetlands Recovery Project	\$675,000
	County of Orange--EPA Fine	\$270,000

Last updated: 4/12/2002

C12. El Dorado Wetlands Restoration Plan

Date Completed: 1/02

Local Lead: City of Long Beach

Prepare a plan to restore up to 20 acres of wetlands at the confluence of the San Gabriel River and Coyote Creek, adjacent to the El Dorado Nature Park. Project site is located south of Willow Street, contiguous with the El Dorado Park Nature Center. The restoration plan will look at several alternatives for developing wetlands at this site, including developing seasonal wetlands with periodic flooding. Potential water sources include the San Gabriel River or an existing lake and creek at the Nature Center. Enhancement plans would include an interpretive program and limited public access, probably limited to the periphery. The City has \$100,000 to do a Master Plan for the Nature Center and the area south of Willow Street.

The City owns approximately 7 acres at this site; the remainder is part of a Southern California Edison right-of-way. The City is discussing use of this right-of-way with SCE. The property is occasionally used for retention of flood waters. It is located approximately 2.5 miles north of the Los Cerritos Wetlands.

Total cost: \$100,000

Funding: City of Long Beach \$100,000

Cost Notes: City of Long Beach completed restoration plan without WRP funding.

Last updated: 2/18/2000

Topanga Creek Restoration Program

- Topanga Lagoon Restoration Technical Assessments
- Topanga Lagoon and Watershed Restoration Feasibility Study

C13. Topanga Lagoon Restoration Technical Assessments

Date Completed: 8/03

Local Lead: RCD of the Santa Monica Mountains

Undertake technical assessments for restoration of Topanga Lagoon based on conceptual plan in Topanga Lagoon and Watershed Restoration Feasibility Study. WRP funding will be used specifically to evaluate the composition of the soil fill in the areas designated in the Feasibility Study for potential lagoon restoration. Approximately 20-30 acres of fill material over 35 feet deep was placed into the former Topanga Lagoon by Caltrans in 1934 when Pacific Coast Highway (PCH) was re-aligned. In order to assess the potential for beach and nearshore disposal of sediment removed, borings will be taken along two transects perpendicular to Topanga State Beach and also at the PCH bridge pads. Samples will be tested in the laboratory for particle size distribution and for chemical compounds. Gradation curves will be analyzed and used to establish grain size criteria for disposal. All samples will be archived for possible additional testing in the future.

Total cost: \$310,000

Funding: SCC-Wetlands Recovery Project \$77,000
 SCC-Santa Monica Bay Restoration Project \$233,000

Last updated: 4/18/2002

C14. Topanga Lagoon and Watershed Restoration Feasibility Study

Date Completed: 5/02

Local Lead: RCD of the Santa Monica Mountains

Prepare feasibility studies needed to determine the potential for restoring some of the historic extent and function of Topanga Creek and Lagoon. As part of the studies, the creek's physical processes would be evaluated including flooding, sedimentation, hydrology, water quality, land use, wildfires, and invasive species.

Topanga Creek is the third largest watershed along Santa Monica Bay and supports excellent biodiversity. Adult and juvenile steelhead have been documented in the creek in 1999 and 2000. A major piece of the former lagoon part of Topanga County Beach. Another portion is owned by LA Athletic Club and is under option for parkland acquisition. Potential restoration of the lagoon would be enhanced by this acquisition, but is not dependent on it.

Total cost:		\$483,800
Funding:	SCC-Wetlands Recovery Project	\$110,000
	Dept. of Conservation	\$5,500
	Dept. of Forestry	\$39,500
	California EPA	\$53,800
	Dept. of Fish and Game	\$92,000
	Dept. of Water Resources	\$13,000
	Los Angeles County, DPW	\$23,000
	Topanga Watershed Committee	\$9,000
	RCD of the Santa Monica Mountains	\$30,000
	SCC-Santa Monica Bay Restoration Project	\$58,000
	Coastal Conservancy	\$50,000

Last updated: 5/7/2002

C15. Upper Zuniga Road Acquisitions

Date Completed: 11/01

Local Lead: Mountains Restoration Trust

Acquire approximately 120 acres in the upper Topanga watershed including Zuniga Pond. The Mountains Restoration Trust has opened escrow on three parcels in the project area. The subject property is located near Upper Zuniga Road and includes a manmade pond that supports western pond turtle habitat, a state-listed species of special concern. The site also provides suitable habitat for rock crevice dwelling western mastiff bats and the San Diego Coast Horned Lizard, which are also species of concern. The pond is filled seasonally and supports a well-developed cattail-willow community. The pond is located close to the creek, allowing the turtles to migrate between the creek and the pond.

Total cost:		\$1,000,000
Funding:	SCC-Wetlands Recovery Project	\$250,000
	Santa Monica Mountains Conservancy	\$686,600
	County of Los Angeles	\$83,400

Last updated: 3/13/2000

C16. Tuna Canyon SEA Acquisition

Date Completed: 5/02

Local Lead: Mountains Restoration Trust

Acquire approximately 417 acres of land at the lower end of Tuna Canyon to protect a perennial spring and well-developed riparian habitat. The acquisition fills a critical gap, connecting State Parks' lower Topanga Canyon property to the west with the Mann property to the east, recently acquired by the Santa Monica Mountains Conservancy, to form an integrated conservation area encompassing some of the most significant environmental assets of the Santa Monica Mountains.

The Tuna Canyon SEA project encompasses nearly pristine watershed communities, including riparian wetland habitat, native oak woodlands, coastal sage scrub and chaparral-covered hillsides. These habitats support a wide variety of the native wildlife of the Santa Monica Mountains. Acquisition will protect several rare, endangered, or threatened species and protect regionally significant wildlife corridors and linkages between Topanga State Park and Malibu Creek State Park. The Tuna Canyon area is also an important habitat for migratory songbirds. The site potentially supports numerous other sensitive wildlife species including, but not limited to, San

Diego desert wood rat, peregrine falcon, northern harrier, coastal whiptail, San Bernardino ringneck snake, and San Diego mountain king snake. The project contains the entire lower portion of Tuna Canyon Creek, a pure, free-running stream that plunges seaward in a series of waterfalls and pools from an elevation of 1500 feet to Santa Monica Bay. A portion of Pena Canyon Creek and its watershed are also covered by the project.

Total cost: \$1,625,000

Funding:	SCC-Wetlands Recovery Project	\$700,000
	Santa Monica Mountains Conservancy	\$75,000
	National Fish and Wildlife Foundation	\$50,000
	Coastal Conservancy (HCF)	\$800,000

Cost Notes: The SMBRP approved \$88,450 to MRT for eradication of invasive species in Tuna Canyon.

Last updated: 5/7/2002

C17. Cold Creek Riparian Acquisitions, Part 1

Date Completed: 10/01

Local Lead: Mountains Restoration Trust

Acquire 71.5 acres of upland and riparian habitat along Cold Creek, a tributary to Malibu Creek. Approximately 32 acres of the property are riparian habitat, with the riparian corridor ranging from 100 to 800 feet wide. The proposed acquisition is part of the Cold Creek Restoration Plan, a comprehensive acquisition and enhancement program for the watershed. The project site will become part of the Cold Creek Preserve owned and managed by the Mountains Restoration Trust. Cold Creek is a largely undisturbed creek that historically provided habitat for the Steelhead trout.

Total cost: \$1,950,000

Funding:	SCC-Wetlands Recovery Project	\$719,000
	County of Los Angeles	\$786,000
	Mountains Restoration Trust -- private donation	\$545,000

Last updated: 3/6/2001

Malibu Creek Lagoon and Watershed Program

- Malibu Creek Arundo Removal Project

C18. Malibu Creek Arundo Removal Project

Date Completed: 6/03

Local Lead: Mountains Restoration Trust

Remove Arundo donax from approximately 5.2 miles of stream corridor along Malibu Creek. The project reach extends from the Malibu Lagoon bridge on Pacific Coast Highway to the bridge on Malibu Canyon / Las Virgenes Road and encompasses approximately 105 acres. The lower Malibu Creek Enhancement Plan prepared by researchers from UCLA identified eradication of Arundo donax (and associated invasive plant species) as the most effective restoration activity among all the biota and habitat management alternatives considered.

The project is a six-year effort to remove Arundo from the project reach. The project will help stop the further invasion of Arundo in Malibu Lagoon and will improve habitat for tidewater goby and steelhead trout.

Total cost: \$358,400

Funding:	Dept. of Parks and Recreation, in-kind	\$33,700
	National Park Service	\$57,100
	County of Los Angeles	\$54,000
	Other	\$4,600
	Mountains Restoration Trust	\$20,000
	SCC-Santa Monica Bay Restoration Project	\$189,000

Cost Notes: Funded by Santa Monica Bay Program, rather than by WRP.

Last updated: 3/6/2001

Calleguas Creek and Watershed Program

- Grimes Canyon Stream Restoration Project

C19. Grimes Canyon Stream Restoration Project

Date Completed: 5/02

Local Lead: RCD of Ventura County

Complete stream bank stabilization and revegetation project in Grimes Canyon, a tributary to Calleguas Creek. This project is already underway with funding from the Conservancy and U.S. EPA, and in-kind services from adjacent landowners. Additional funding is needed to complete the project. Grimes Canyon is a major source of sediment input to Calleguas Creek. The project is intended to demonstrate innovative, environmentally-sensitive streambank stabilization methods that can be implemented by farmers throughout the watershed.

Total cost:	\$976,400
Funding:	
SCC-Wetlands Recovery Project	\$220,000
U.S. Environmental Protection Agency	\$182,500
Ventura County RCD and landowners (in-kind)	\$143,300
Coastal Conservancy (HCF, SpDepAcct)	\$385,600

Last updated: 3/1/2001

C20. Ormond Beach Edison Acquisition

Date Completed: 6/02

Local Lead: Coastal Conservancy

Acquisition of approximately 265 acres of the Ormond Beach wetlands. The site is located south of the City of Oxnard between Edison Drive and Arnold Road. It includes approximately 200 acres of wetlands and dunes, and a tank farm that covers 60 acres. Anticipated restoration would include modifications of the site hydrology to reintroduce tidal action and bring back freshwater flows that had formerly drained across the Oxnard Plain to the coastal wetlands.

Total cost:	\$9,710,121
Funding:	
SCC-Wetlands Recovery Project	\$2,177,000
U.S. Fish and Wildlife Service	\$938,000
California EarthCorps	\$1,300,000
Coastal Conservancy (HCF)	\$6,223,000

Last updated: 9/20/2002

Ventura River Watershed Program

- Matilija Dam Evaluation Project

C21. Matilija Dam Evaluation Project

Date Completed: 1/01

Local Lead: County of Ventura

Perform various studies to evaluate the feasibility of removing Matilija Dam on the Ventura River to restore natural water and sediment flows, and provide access to upstream steelhead trout habitat. The SCWRP funds will be used to investigate the most efficient and cost-effective way to remove concrete from the dam. Concrete will be removed from the side of the dam, where it is already notched. There will be no effect on water storage or sediment flows from this pilot project.

Other studies being undertaken include a reconnaissance study by the U.S. Army Corps of Engineers that will include an initial engineering study, and various technical studies by the U.S. Bureau of Reclamation and the U.S. Geological Service including sediment analysis, characterization of downstream habitat, analysis of impact of sediment releases of various sizes on downstream habitat

Total cost:		\$615,000
Funding:	SCC-Wetlands Recovery Project	\$200,000
	U.S. Bureau of Reclamation/USGS	\$280,000
	U.S. Army Corps of Engineers	\$100,000
	County of Ventura (inkind)	\$35,000

Last updated: 5/7/2002

C22. Carpinteria Salt Marsh, Basin 1 Enhancement Plan **Date Completed:** 6/03

Local Lead: Land Trust of Santa Barbara County

Prepare an enhancement plan for restoration of Basin 1, approximately 23 acres in the Carpinteria Salt Marsh. The Carpinteria Salt Marsh Preserve/Reserve Management Plan includes a recommendation that this portion of the marsh be enhanced, now that the Ash Avenue section of the marsh restoration is complete. The property is located just west of the Ash Avenue restoration site. The Land Trust of Santa Barbara County owns the property. The enhancement plan will be developed in coordination with the Santa Barbara County Flood Control District's proposed enhancement/mitigation projects.

Total cost:		\$100,000
Funding:	SCC-Wetlands Recovery Project	\$100,000

Last updated: 4/11/2002

C23. Arroyo Hondo Ranch Acquisition **Date Completed:** 10/01

Local Lead: Land Trust of Santa Barbara County

Acquire 778 acres of riparian and grassland habitat along Arroyo Hondo Creek on the Gaviota Coast. The Arroyo Hondo Ranch extends from the coast up to the Los Padres National Forest. The property boundaries follow the ridgelines on either side of the canyon, and encompass almost all of the watershed. Arroyo Hondo Creek flows year-round all the way to the ocean and supports known populations of steelhead trout (endangered), red-legged frog (threatened) and California newt and southwestern pond turtles (both listed as species of concern in California.).

Total cost:		\$6,176,000
Funding:	SCC-Wetlands Recovery Project	\$1,000,000
	Santa Barbara County	\$350,000
	Land Trust of Santa Barbara County	\$1,826,000
	Coastal Conservancy	\$3,000,000

Last updated: 2/18/2000
